



Virginia
Regulatory
Town Hall

Final Regulation Agency Background Document

Agency Name:	Department of Health (State Board of)
VAC Chapter Number:	12 VAC 5-610-10 et seq.
Regulation Title:	Sewage Handling and Disposal Regulations
Action Title:	Amended Regulations
Date:	March 29, 2000

Please refer to the Administrative Process Act (§ 9-6.14:9.1 *et seq.* of the *Code of Virginia*), Executive Order Twenty-Five (98), Executive Order Fifty-Eight (99) , and the *Virginia Register Form, Style and Procedure Manual* for more information and other materials required to be submitted in the final regulatory action package.

Summary

Please provide a brief summary of the new regulation, amendments to an existing regulation, or the regulation being repealed. There is no need to state each provision or amendment; instead give a summary of the regulatory action. If applicable, generally describe the existing regulation. Do not restate the regulation or the purpose and intent of the regulation in the summary. Rather, alert the reader to all substantive matters or changes contained in the proposed new regulation, amendments to an existing regulation, or the regulation being repealed. Please briefly and generally summarize any substantive changes made since the proposed action was published.

The final amendments address public concerns received after the final regulations were published in August 1999 and during the two extended public comment periods as published in the Virginia Registrar. Areas addressed in these changes affect the grandfather clause, mass sewage disposal systems, sites with greater than 50% rock, the use of shallow placed systems with pretreatment, and several editorial changes and clarifications.

Changes Made Since the Proposed Stage

Please detail any changes, other than strictly editorial changes, made to the text of the proposed regulation since its publication. Please provide citations of the sections of the proposed regulation that have been altered since the proposed stage and a statement of the purpose of each change.

VAC Section Numbers(s):

- 12 VAC 5-610-70 Amends the Grandfather Clause to include certain certification letters.
- 12 VAC 5-610-75 Adds a provision for the automatic renewal of certain permits.
- 12 VAC 5-610-120 Amends the definition of the Grandfather Clause.
- 12 VAC 5-610-255 Clarifies the relationship between certification letters and conditional permits.
- 12 VAC 5-610-449 Clarifies how single ownership of mass sewage disposal systems will be handled in subdivisions
- 12 VAC 5-610-594 Removes requirements related to sites with 50% rock.
- 12 VAC 5-610-596 Removes requirements related to sites with 50% rock.
- 12 VAC 5-610-597 Removes requirements related to sites with 50% rock.
- Table 4.1 Clarifies that the separation distance to a spring apply when the source of contamination is located up slope of the spring.
- Table 4.2 Revises well classes to comply with the Private Well Regulations.
- Table 4.3 Removes requirements related to sites with 50% rock.
- Table 4.4 Removes requirements related to sites with 50% rock.
- Table 5.1 Design flow clarification for doctor’s offices

Statement of Final Agency Action

Please provide a statement of the final action taken by the agency: including the date the action was taken, the name of the agency taking the action, and the title of the regulation.

The State Health Commissioner, vested with the authority of the State Board of Health pursuant to Section 32.1-20 of the Code of Virginia, adopted these final regulations on April 3, 2000.

Basis

Please identify the state and/or federal source of legal authority to promulgate the regulation. The discussion of this statutory authority should: 1) describe its scope and the extent to which it is mandatory or discretionary; and 2) include a brief statement relating the content of the statutory authority to the specific regulation. In addition, where applicable, please describe the extent to which proposed changes exceed federal minimum requirements. Full citations of legal authority and, if available, web site addresses for locating the text of the cited authority, shall be provided. If the final text differs from that of the proposed, please state that the Office of the Attorney General has certified that the agency has the

statutory authority to promulgate the final regulation and that it comports with applicable state and/or federal law.

The authority for the Sewage Handling and Disposal Regulations is found in § 32.1-164 of the Code of Virginia. The Code specifically authorizes the Board of Health to adopt regulations governing the location and construction of septic systems, and other onsite sewage systems, so that public health is protected and ground and surface water contamination is prevented. Enter Statement Here

Purpose

Please provide a statement explaining the need for the new or amended regulation. This statement must include the rationale or justification of the final regulatory action and detail the specific reasons it is essential to protect the health, safety or welfare of citizens. A statement of a general nature is not acceptable, particular rationales must be explicitly discussed. Please include a discussion of the goals of the proposal and the problems the proposal is intended to solve.

The adopted amendments remove technical and administrative restrictions found in previous regulations that delay or prevent the issuance of permits. At the same time these restrictions are removed, the regulations provide equal or better environmental protection by better utilizing new technology, and provide for better flexibility in adapting to changing technology. The revisions will generally provide the citizens of Virginia with both more development options and more environmentally sound development options. The final changes were initiated primarily from recommendations made by the Task Force on Septic Tank Regulations which was charged with examining the adequacy of the regulations relative to ground water contamination. The task force was comprised of individuals representing the development community, environmental interests, private sector soil scientists, industry, academia and affected regulatory agencies. The task force issued a report suggesting 11 changes to improve the onsite program.

Subsequently, the USEPA issued regulatory guidelines for the siting and operation of onsite systems under Section 6217 of the Coastal Zone Management Act. The USEPA requires "...states with coastal zone management programs to develop coastal nonpoint pollution programs to control sources of nonpoint pollution which degrade coastal water quality or face the loss of federal grant funds." The increased separation distance to water table and rock, septic tank maintenance, and mass drainfield requirements are necessary to comply with the EPA recommendations.

Substance

Please identify and explain the new substantive provisions, the substantive changes to existing sections, or both where appropriate. Please note that a more detailed discussion is required under the statement of the regulatory action's detail.

The Grandfather Clause (12 VAC 5-610-70, 12 VAC 5-610-75, and 12 VAC 5-610-120)

The Grandfather Clause was modified granting the holders of certification letters and permits issued after November 1, 1982, a period of 18 months to obtain a permit under the regulations in effect at the time the approval was granted.

Conditional Permits (12 VAC 5-610-255) The revisions clarify that no certification letter will be issued for a conditional certification letter pursuant to §250 J.

Mass Sewage Disposal Systems (12 VAC 5-610-449)

The text of 12 VAC 5-610-449 was amended to clarify that the single owner requirement for a subdivision would be implemented at the time the subdivision is reviewed by the Department. Furthermore, none of the ownership or ongoing operation and monitoring requirements of mass sewage disposal systems would apply to systems serving single family dwellings after the initial review.

Fifty-percent Rock (12 VAC 5-610-594, 12 VAC 5-610-596, 12 VAC 5-610-597, Table 4.3, and Table 4.4)

Multiple references to 50% rock were deleted.

Shallow-placed systems (12 VAC 5-610-596)

This section was revised to clarify that the placement of systems as shallow as 12 inches in Texture Group III and IV soils is allowed when pretreated effluent is utilized.

12 VAC 5-610-599.4 Editorial change. A duplicated section of the regulations was struck.

Table 4.1

This table was revised to clarify that the separation distance between a developed spring and defined sources of contamination only apply when the spring is located downslope.

Well Class Designations (Table 4.2)

The Classes of Wells was updated to reflect those found in the Private Well Regulations.

Design flow value (Table 5.1)

The design flow values for a Doctor's office in a medical center were incorrectly based on each 100 square feet of office space. The correct basis for estimating wastewater flows is per 1,000 square feet of floor area and the revision corrects this error.

Issues

Please provide a statement identifying the issues associated with the final regulatory action. The term "issues" means: 1) the advantages and disadvantages to the public of implementing the new provisions; 2) the advantages and disadvantages to the agency or the Commonwealth; and 3) other pertinent matters of interest to the regulated community, government officials, and the public. If there are no disadvantages to the public or the Commonwealth, please include a sentence to that effect.

There are two primary advantages of the proposed regulation changes to the public and the Commonwealth. First, ground water contamination due to septic systems will be reduced. This will provide protection against waterborne illnesses and minimize the need for localities and the Commonwealth to provide for public water and sewerage facilities. Second, this increase in ground water protection will occur while simultaneously allowing an increase in the number of approvable sites. In addition to providing individual citizens with new building options the Commonwealth and localities will benefit from the expanding tax base. This two-fold advantage is possible because of careful regulatory revisions that incorporate recent scientific research findings. There was great concern about economic impact to builders and low income home owners in the initial regulations. The final amendments have decreased the economic cost.

There are no disadvantages to the agency or Commonwealth of implementing the proposed amendments to the regulation. The primary short-term economic disadvantage to the public of the proposed amendments is that mass drainfield requirements impose new restrictions on large scale onsite development. These increased restrictions include the installation of ground water monitoring wells, ground water sampling requirements, and a 100% repair area to replace the system when it fails. Long term advantages include having the ability to repair the system onsite rather than having to provide sanitary sewer facilities, and identifying ground water contamination before the levels exceed public health standards and jeopardize nearby residents. The proposed revisions also formalize existing requirements to evaluate the impact of nitrogen loading and ground water mounding which have been implemented under general authority provisions of the current regulations. These requirements are included in the least intrusive manner that appears to comply with USEPA guidance on mass drainfields. The Department believes the long-term advantages outweigh the short-term disadvantages. Similarly, there was felt to be a disadvantage and possible harm to farmland in the previously included 50% rock section. Now, regulations should not increase development of farmland.

Public Comment

Please summarize all public comment received during the public comment period and provide the agency response. If no public comment was received, please include a statement indicating that fact.

PUBLIC COMMENT: The Board received approximately 65 written requests to suspend the regulatory process pursuant to § 9-6.14:7.1.K of the Code of Virginia to allow for additional public comments.

AGENCY RESPONSE: The Department published notice in the Virginia Register of Regulations of two 30-day comment periods which ended November 10, 1999, and January 19, 2000, respectively.

PUBLIC COMMENT: Further study is needed; delay implementation; need to hold additional public hearings, local resolutions opposing adoption of the amendments.

AGENCY COMMENT: The Board suspended the regulatory process from the October 1, 1999, implementation date to solicit additional public comment. Two separate 30-day public comment periods were published in the Register and more than 140 written comments were received. Several substantive changes were made to the Final Amendments in response to the comments. The Department and the Board of Health believe that the amendments are necessary to protect public health and the environment and that they are a balanced compromise between the potential economic impacts and the need to protect ground and surface water resources.

PUBLIC COMMENT: Public notice and participation were not adequate in this regulatory process.

AGENCY RESPONSE: The Department has followed the requirements of the Administrative Process Act as well as agency guidelines in the promulgation of these regulations. The Department believes that, with the extended comment periods provided during the suspension of the regulatory process that there has been substantial public input into this process.

PUBLIC COMMENT: Keep the Regulations the same as they are.

AGENCY RESPONSE: The Board of Health and many informed citizens and professionals recognize that the amendments are necessary to prevent ground and surface water contamination in order to protect public health and the environment from the potentially harmful effects of inadequately treated human sewage.

PUBLIC COMMENT: The Final Amendments are not timely; They represent the best efforts of the 1990's; the Regulations need to be re-written to give consideration to projects under the supervision of engineers; the Regulations should be performance-based.

AGENCY RESPONSE: These amendments were conceived as a result of the Secretaries Task Force which published its report in 1991. Proposed regulations were published in 1996. It has taken several years since publication of the proposed regulations to reach some consensus among stakeholders as to the measures necessary to protect public health and the environment and the economic impacts of those measures. These amendments are intended to provide additional protection for ground and surface waters while the Board and the Department begin work on a new set of performance-based regulations. It is presently envisioned that the performance-based regulations will place greater emphasis and responsibility on the engineering community as well as imposing operation and maintenance requirements for all onsite systems.

PUBLIC COMMENT: Secondary effluent systems should be based on performance, not on site and soil conditions.

AGENCY RESPONSE: Performance-based regulations and the issuance of permits outside of traditional prescriptive site and soil criteria are concepts that the Department is exploring for inclusion in a future regulation. The Department believes that fundamental changes in the regulatory program are needed to effectively implement a performance-based program. These changes include effective monitoring programs, data collection and reporting, a statewide infrastructure of trained private sector specialists, and changes in enforcement policies and authority.

PUBLIC COMMENT: The Regulations dictate soil science to Soil Scientists; they contain inaccurate statements; having one regulation for the entire state is unfair and unrealistic; the Regulations should contain general, not specific, guidelines for site suitability.

AGENCY RESPONSE: The Board of Health's regulations are prescriptive in nature and are intended to establish clear and recognizable site and soil criteria for determining whether or not a permit may be issued. Soil science is an important element in developing any regulation dealing with the suitability of site and soil conditions for treatment and disposal of wastewater, however the Regulations are not primarily intended to be a work of soil science. The Regulations are intended to establish clear guidelines that can be implemented by the agency and understood by the public and by those trained in soil science. General guidelines in most cases do not make adequate regulatory standards that can be fairly and uniformly applied to citizens across the Commonwealth.

PUBLIC COMMENT: Certification letters and subdivision approvals already granted should be indefinitely grandfathered to the prior Regulations.

AGENCY RESPONSE: The Final Amendments have been modified to provide an 18 month period from the effective date during which the holder of a certification letter or the owner of a lot in a subdivision approved by the Department since November 1, 1982, may apply for a construction permit under the regulations that were in effect when the approval or letter was granted.

PUBLIC COMMENT: All previously issued permits should be grandfathered to the prior regulations.

AGENCY RESPONSE: The Final Amendments when published August 16, 1999, contained a provision that all permits valid on the effective date of the amendments were automatically extended for 18 months. That provision is retained in the Final Amendments. A permit is a specific authorization to construct a system within a specified period of time. An owner seeking approval of a site who does not intend to construct a system is required to seek a certification letter. The certification letter has no expiration date and may be recorded in the land records as proof that the property is approved by the Department. Systems designed for installation at a later date on the basis of certification letters are subject to such new requirements as may be implemented by the Board to protect public health and the environment.

PUBLIC COMMENT: The requirements pertaining to 50% rock should be deleted from the amendments or modified to reduce economic impacts.

AGENCY RESPONSE: The Board has deleted the requirements pertaining to 50% rock from these amendments.

PUBLIC COMMENT: The new regulations fail to adequately deal with existing homes without indoor plumbing; there should be different treatment standards for low-income individuals living in sub-standard conditions.

AGENCY RESPONSE: The Department and the Board recognize the need to implement wastewater treatment and disposal strategies for under-served communities and for citizens

currently living without indoor plumbing. The Department respectfully disagrees that a lower standard of public health and environment should be applied in these situations. Instead, the Department is working with other agencies and stakeholders to identify sources of funding for alternative treatment technologies and with entities to manage those systems on a long-term basis. The Department intends to address these issues in the short-term through policy and demonstration projects and in the long-term through additional regulation changes.

PUBLIC COMMENT: Allowing primary (septic) effluent for Mass Sewage Disposal Systems (MSDS) is dangerous and should be limited to systems of 1,000 gpd or less.

AGENCY RESPONSE: The Department appreciates the concern for groundwater demonstrated by this comment. The MSDS requirements in the Final Amendments will require that an applicant reduce the strength of wastes to that of domestic wastewater through appropriate treatment methods. Other MSDS requirements are intended to ensure that large systems do not create saturated conditions in the soil or contribute nitrogen to the ground water at levels that would exceed ground water standards.

PUBLIC COMMENT: The Regulations are unclear as to the methods used to determine shrink-swell characteristics in soils.

AGENCY RESPONSE: The Final Amendments do not contain any changes in shrink-swell definitions or requirements from the Regulations that have been in effect since 1982. The Department is not aware of widespread problems related to shrink-swell determination and relies on the judgement and expertise of trained and experienced site and soil evaluators to make these determinations.

PUBLIC COMMENT: The Regulations should not prohibit the installation of shallow trenches (12" depth) with secondary or better treatment in soils with percolation rates between 45 and 120 MPI (Texture Groups III and IV).

AGENCY RESPONSE: The Department has adjusted the language in the Final Amendments pertaining to shallow trench installations so that 12" trench systems with secondary or better treatment are allowed in all four texture group soils.

PUBLIC COMMENT: The amendments should not allow the use of alternative (secondary) treatment systems, or if they are allowed the amendments should require maintenance of such systems and funding should be provided to the Department for implementing the necessary oversight.

AGENCY RESPONSE: The Department agrees that maintenance and operation (including monitoring) requirements should be incorporated into the Regulations for all onsite wastewater systems. The Department has been allowing the installation of certain onsite systems with secondary or better treatment by policy since 1993. The Final Amendments were intended to establish new requirements for ground and surface water protection as well as to incorporate the alternative systems already allowed into the Regulations. As the amendments were written, the secondary treatment options offer alternatives to the public for receiving construction permits that they would not otherwise have been able to obtain given the new requirements for separation from such limiting factors as seasonal water table and rock. The Department intends to ask the Board to consider new regulations in 2000 that will establish maintenance and monitoring requirements for all systems. The Department anticipates that the regulatory process may be lengthy in order to reach consensus with the many affected parties and chose not to delay the implementation of the amendments for that reason.

PUBLIC COMMENT: The Regulations should not contain maintenance requirements for septic tanks.

AGENCY RESPONSE: The Final Amendments do not establish any new maintenance requirements for septic tanks or septic tank systems other than the installation of an inspection port in the septic tank. The Department expects that this requirement will result in better voluntary maintenance since it will allow tanks to be pumped only when pumping is necessary. This measure should also serve to reduce septage disposal needs by reducing or eliminating unnecessary pumping.

PUBLIC COMMENT: The Regulations should contain site and soil criteria that are specific to various areas or regions of the state.

AGENCY RESPONSE: The Department is aware of this concern that has been expressed numerous times about the current Regulations and the Final Amendments. Certain regional features, such as shellfish waters and karst geology, deserve special protection or consideration when wastewater systems are being planned. However, the Department believes that there are basic, fundamental similarities that exist in site and soil conditions across the state such as permeability, slope, color, and texture. The Department believes that proper training and education, together with experience in the local area are more appropriate for implementing a statewide program than trying to develop differing sets of requirements for different regions.

PUBLIC COMMENT: "Sand on sand" systems are not a viable alternative; the Regulations should provide more alternatives.

AGENCY RESPONSE: The "sand on sand" systems were added to the Final Amendments in response to concerns raised by the public over the potential economic impact of the new requirements for separation from seasonal water tables. The Department agrees that there are alternative systems that would represent a better choice for ultimate protection of ground and surface waters and no citizen is prevented from installing a "better" system under the amendments. The Department is convinced that the proposed "sand on sand" systems will offer protection for ground and surface waters that is superior to the current requirements (2" separation to water table in sandy soils) while offering an economically viable option to secondary treatment systems.

PUBLIC COMMENT: Provisional systems are a valuable addition to the Regulations.

AGENCY RESPONSE: The Department appreciates public support for this measure that is established as an alternative to the experimental process and is intended to speed the evaluation and approval of alternative technologies by providing a mechanism for considering performance data gathered from other parts of the country or other countries.

PUBLIC COMMENT: Requiring data on 50 systems for Provisional Approval is not compatible with "encouraging innovative technology."

AGENCY RESPONSE: As noted above, the provisional approval process was established as an alternative to experimental testing which can be a lengthy process. The Department is committed to encouraging the use of alternative systems that have been demonstrated to perform at least as well as those systems already approved.

PUBLIC COMMENT: Mound systems have a poor history in Virginia; more alternative systems should be provided.

AGENCY RESPONSE: The Department is aware of some problems associated with mounds in Virginia. Most problems are related to construction practices, post-construction erosion, and poor site protection. The Final Amendments contain alternatives to mound systems (shallow, non-trench systems with secondary or better treatment) and the Department has approved at least two other systems (Puraflo®) and spray irrigation that offer alternatives to mound systems.

PUBLIC COMMENT: The requirements for secondary treatment when repairing a system that has failed and the site and soil conditions for a septic effluent system cannot be met impose an unreasonable economic impact.

AGENCY RESPONSE: The Final Amendments provide for this requirement to be waived if an economic hardship is determined. The Department believes that assisting citizens in finding sources of funding is a better alternative when repair systems than compromising on proper treatment of sewage.

PUBLIC COMMENT: The new requirements will create unreasonable economic impacts on the citizens of the Commonwealth, especially as related to the separation distance to seasonal water table and rock; the Department does not have sufficient justification to support the changes.

AGENCY RESPONSE: The Department has worked over a period of almost 10 years to reach a compromise between potential economic impacts and requirements necessary to protect ground and surface waters. The Final Amendments are a compromise and reflect the input of many citizens, professionals, and Department staff. Studies in Virginia, comparisons with other state's regulations, and laboratory research all demonstrate that Virginia's current Regulations are inadequate to protect ground and surface waters from harmful bacteria, viruses, and nutrients contained in human sewage. The separation distances contained in the Final Amendments will make possible the installation of some conventional septic systems where they were not allowed previously, and offer alternative systems that can be installed on sites previously deemed unsuitable. The secondary treatment systems contained in the Final Amendments are intended to offset the potential impacts of the increased separation distances by allowing systems to be installed where they would otherwise have been denied as a result of the increases.

PUBLIC COMMENT: Virginia needs to update its regulations and these amendments are a step in the right direction.

AGENCY RESPONSE: The Department appreciates support for the goals of increased protection of public health through improved water quality protection.

PUBLIC COMMENT: The new requirements will hamper growth and development in some localities.

AGENCY RESPONSE: The Department has worked to develop a regulation that results in no increase in the denials of permits and potentially will allow for the issuance of permits in previously unsuitable areas. Some systems will be more costly, at least initially, than conventional septic systems. Growth and development are local issues that the Board has no authority or desire to regulate.

PUBLIC COMMENT: The fill systems included in the amendments are too costly.

AGENCY RESPONSE: The fill systems, including sand on sand, were added at the request of citizens groups to offset the potential economic impact of other requirements.

PUBLIC COMMENT: The health department is too slow in processing applications for permits and other approvals.

AGENCY RESPONSE: The new program for Authorized Onsite Soil Evaluators and Professional Engineers that allows these private-sector individuals to certify sites as complying with the Board's regulations is intended to provide citizens with an alternative method for seeking Department approval that is subject to strict time limits established in the Code of Virginia.

PUBLIC COMMENT: The amendments do not establish the conditions under which permits may issued for a subdivision where a public water supply has reached its permitted capacity.

AGENCY RESPONSE: The amendments were not intended to make any changes to the Regulations in this regard. The Regulations already provide that the Department may deny an application in a subdivision where a public water supply has reached its permitted capacity.

PUBLIC COMMENT: The term “drainfield acre” should be defined.

AGENCY RESPONSE: The Department attempted to define this term in earlier drafts of the proposed amendments. The Department will implement this regulation using a reasonable approach that will be published as a guidance document.

PUBLIC COMMENT: The amendments as written establish a single-owner requirement for subdivisions that appears to limit the ability of a developer to sell a home with an individual system.

AGENCY RESPONSE: This was not the intent and the amendments have been modified to clarify this. The Mass Sewage Disposal System requirements, including the single-owner requirement, will apply to the subdivision at the time the local government is seeking the Department’s approval for the sewage system sites. The developer will be responsible at that time for meeting the MSDS requirements. No MSDS requirements will be carried over to the owner of an individual system serving an individual single-family dwelling.

PUBLIC COMMENT: The mass drainfield (MSDS) requirements will impose unreasonable economic impacts; the increased dilution area will stop rural development because it will require more land.

AGENCY RESPONSE: The Department believes that Mass Sewage Disposal Systems have a great potential to contaminate ground and surface waters and that a failure of an MSDS represent a great threat to the health of the people surrounding the system and to the environment. For this reason, the MSDS requirements are considered a critical element of the amendments. The Department made changes to the MSDS requirements in response to public comments in an attempt to offset to the greatest extent possible the potential economic impacts.

PUBLIC COMMENT: The MSDS criteria should allow the developer to provide data from a nearby subdivision and thereby grant an exception to the MSDS requirements.

AGENCY RESPONSE: The Department respectfully disagrees with this comment on the basis that proper wastewater planning depends on a site-specific assessment of geologic and hydrologic conditions. Data from nearby locations may be invaluable to the professionals who are performing the site assessments, however such data cannot replace site-specific knowledge.

PUBLIC COMMENT: Under the old criteria MSDS used 50% volatilization of nitrates whereas the new requirement is based on 30%; the nitrate standard is now 5 mg/l instead of 10.

AGENCY RESPONSE: The nitrate requirements of the amendments are written to comply with the regulations of the Department of Environmental Quality and to update the requirements with accepted engineering practices.

PUBLIC COMMENT: Shallow trenches (12") in soils with percolation rates of 45 MPI or better should not require secondary treatment.

AGENCY RESPONSE: The Department believes that secondary treatment is necessary in these situations because the shallow systems are more likely to be damaged by activities on the surface such as lawn maintenance or by animals. Because of the increased potential for damage and the location near the surface there is an increased risk of exposure to the effluent from the system and therefore a higher standard of treatment is warranted.

PUBLIC COMMENT: Sections 470.D and 490.E contain the statement “...or where soil concretions have formed.” This statement may be misinterpreted and lead to denial of an

otherwise suitable site. In the absence of other soil wetness indicators, concretions alone are poor indicators of water table. This reference should be omitted.

AGENCY RESPONSE: The Department believes that sufficient expertise and knowledge exist in the onsite wastewater community, both with VDH personnel and the private sector, to distinguish between soil concretions that are indicative of restricted internal drainage or seasonal wetness and those that are not.

PUBLIC COMMENT: "Townhomes" should be added as an example of a MSDS.

AGENCY RESPONSE: The Department believes that the language contained in the amendments is sufficient to establish the definition of an MSDS.

PUBLIC COMMENT: The Department should develop a Geographical Information System that is interfaced with local governments.

AGENCY RESPONSE: The Department appreciates the support of local governments in this area. However, there is currently no funding available to the Department for development of such a system.

PUBLIC COMMENT: The new regulations will force development onto farmland that local governments are trying to preserve; the Regulations should establish minimum lot sizes.

AGENCY RESPONSE: The Board's Regulations are written to protect public health and the environment based on the quality of effluent discharged and the site and soil conditions in the location of the sewage system. Land use and control are local functions that the Board has no authority to regulate.

PUBLIC COMMENT: Where a chlorinated, public water supply is used, the requirements of the Regulations should be relaxed.

AGENCY RESPONSE: The Department respectfully disagrees with this concept. Protection of ground and surface waters is a goal that stands in many ways separate from the end-use of the water resources. Following this reasoning could potentially result in contaminated aquifers that would require extensive remediation or treatment before they could be rendered safe for human consumption.

PUBLIC COMMENT: The higher cost of alternative systems may prevent some people from repairing failed systems resulting in more damage to the environment.

AGENCY RESPONSE: As noted above, the Department believes that proper wastewater treatment and disposal are independent of individual economic conditions. It is more appropriate to concentrate on making funds available to those who need them than to relax treatment and disposal standards to accommodate special economic conditions.

PUBLIC COMMENT: Table 4.3 indicates a 12" separation to bedrock whereas § 596.B.2 indicates that the separation is 18".

AGENCY RESPONSE: This was a typographical error in the table. The correct separation distance is 18" and this has been corrected in the amendments.

PUBLIC COMMENT: The amendments offer a competitive advantage to one proprietary technology over another. Drainfield sizing for aerobic units should be the same as for peat filters.

AGENCY RESPONSE: The amendments do not contain any alternative sizing criteria for peat filters or any other secondary (or better) effluent systems. Alternative sizing (smaller than conventional septic effluent systems) will be addressed in a future regulation proposal. The manufacturer of one peat filter system has recently completed an experimental protocol under the Regulations and the Department has recognized this by establishing a policy allowing installation of that system according to the design criteria under which the system was tested. Others have

approached the Department seeking similar approval and the Department is currently processing those requests.

Detail of Changes

Please detail any changes, other than strictly editorial changes, that are being proposed. Please detail new substantive provisions, all substantive changes to existing sections, or both where appropriate. This statement should provide a section-by-section description - or crosswalk - of changes implemented by the proposed regulatory action. Include citations to the specific sections of an existing regulation being amended and explain the consequences of the changes.

The Grandfather Clause (12 VAC 5-610-70, 12 VAC 5-610-75, and 12 VAC 5-610-120)

The Grandfather Clause was modified granting the holders of certification letters and permits issued after November 1, 1982, a period of 18 months to obtain a permit under the regulations in effect at the time the approval was granted. The 18-month grace period starts on the effective date of the regulations. After this date these individuals must comply to the greatest extent possible with the regulations.

The definition of a grandfathered lot was edited to include subdivision approvals granted between November 1, 1982 and the effective date of these changes. As previously written, these approvals were not grandfathered.

Conditional Permits (12 VAC 5-610-255) The revisions clarify that no certification letter will be issued for a conditional certification letter pursuant to §250 J. For example, an applicant may have a site suitable for a 3-bedroom dwelling (450 GPD) and seek to obtain a conditional certification letter for a 4-bedroom dwelling (600 GPD) based on limited occupancy. Certification letters are transferable and are intended to be a time saving instrument use for speculative properties as opposed to construction permits which are not transferable and are intended to be issued to the owner or their building contractor. Therefore, a condition as described above is appropriately placed on a construction permit and can (and will) be placed on permit drafted from a certification letter.

Mass Sewage Disposal Systems (12 VAC 5-610-449)

Developers and engineers expressed concern over how the Department would implement the requirement for a single owner when considering a subdivision as a mass sewage disposal system. The text of 12 VAC 5-610-449 was amended to clarify that the single owner requirement for a subdivision would be implemented at the time the subdivision is reviewed by the Department and that none of the ownership or ongoing operation and monitoring requirements of mass sewage disposal systems would apply to systems serving single family dwellings after the initial review.

In paragraph A of § 449 a phrase that was inadvertently deleted in the original text was reinserted clarifying the intent of the regulation. Paragraph D of this section was also deleted because it potentially conflicted with §250 paragraph C.

Fifty-percent Rock (12 VAC 5-610-594, 12 VAC 5-610-596, 12 VAC 5-610-597, Table 4.3, and Table 4.4)

Numerous individuals and special interest groups raised concerns that this requirement would have severe impact in the ridge and valley area of the state as well as in several counties in Southwestern Virginia. Multiple references to 50% rock were deleted.

Shallow-placed systems (12 VAC 5-610-596)

Soil consultants and others expressed concern that 12 VAC 5-610-596 eliminated the current (and successful) practice of utilizing Group III and IV soils for shallow-placed systems when pretreatment was provided. This section was revised to clarify that the placement of systems as shallow as 12 inches in Texture Group III and IV soils is allowed when pretreated effluent is utilized.

Table 4.1

This table was revised to clarify that the separation distance between a developed spring and defined sources of contamination only apply when the spring is located downslope.

Well Class Designations (Table 4.2)

The Classes of Wells was updated to reflect those found in the Private Well Regulations.

Sewage handling general. (12 VAC 5-610-599.4)

This section was deleted as it is a verbatim duplicate of 12 VAC 5-610-560.

Design flow value (Table 5.1)

The design flow values for a Doctor's office in a medical center were incorrectly based on each 100 square feet of office space. The correct basis for estimating wastewater flows is per 1,000 square feet of floor area and the revision corrects this error.

Family Impact Statement

Please provide an analysis of the regulatory action that assesses the impact on the institution of the family and family stability including the extent to which the regulatory action will: 1) strengthen or erode the authority and rights of parents in the education, nurturing, and supervision of their children; 2) encourage or discourage economic self-sufficiency, self-pride, and the assumption of responsibility for oneself, one's spouse, and one's children and/or elderly parents; 3) strengthen or erode the marital commitment; and 4) increase or decrease disposable family income.

The Department typically processes over 32,000 applications per year for onsite wastewater systems. The Department's denial rate varies but generally runs between eight and ten percent. The proposed changes have been carefully developed to eliminate, or at least minimize, any adverse impact on the development community while simultaneously increasing environmental and public health protection. Statewide, the Department's six to eight percent denial rate is expected to decline slightly.

Essentially all sites that can presently be developed will remain so. Moreover, some sites that cannot be developed under current implementation of the present regulations will be opened for development. The net result should be an increase in the number of sites that the Department can permit. Additionally, new provisions are incorporated which encourage the safe implementation of innovative over time.